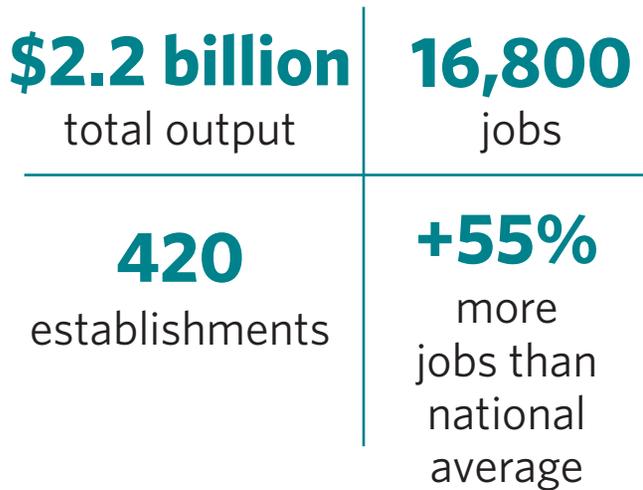


Upstream Metals

This cluster consists manufacturers of metal products such as pipes, metal closures, wires, springs, and related products, as well as iron and steel mills and foundries and related metal processors. The technical report, *Metropolitan Chicago's traded industry clusters*, offers extensive data on the characteristics and performance of the Chicago region's core industrial assets since 2001, available for download at <https://cmap.is/Traded-Clusters>.

In the Chicago region in 2017, this cluster consisted of



Source: CMAP analysis of Economic Modeling Specialists International data (Emsi 2018.4).

Workers in this cluster tend to be **more** racially diverse than the regional labor force.

- 56%** non-white
- 20%** female
- 44%** over age 50

4% commute by transit

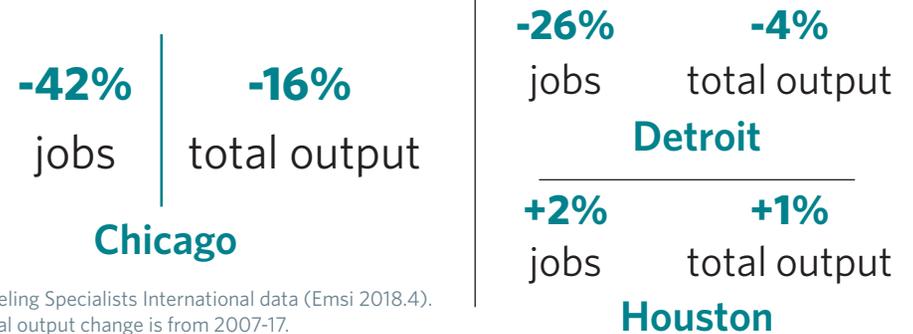


Source: CMAP analysis of Integrated Public Use Microdata Series, 2017 American Community Survey data.

Largest occupations

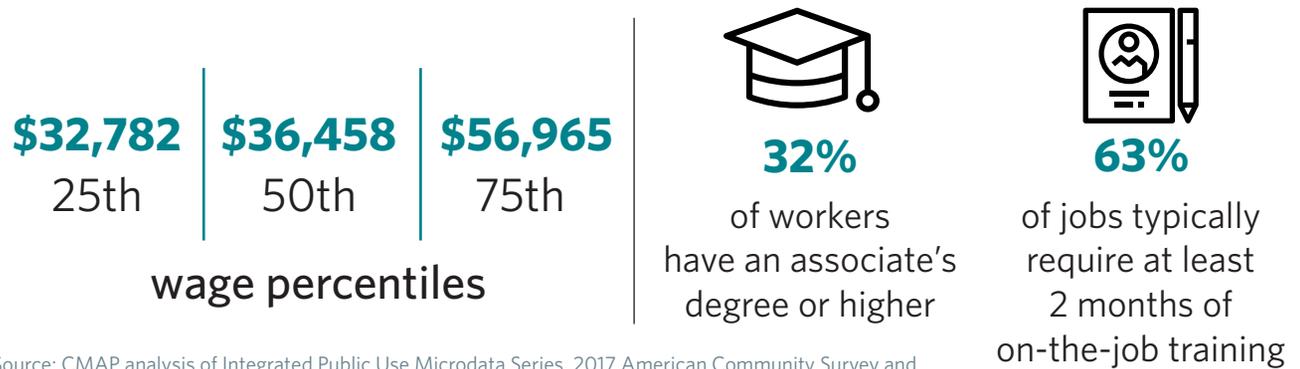
- Assemblers and Fabricators
- Machine Setters
- Inspectors and Testers
- First-Line Supervisors
- Welders and Solderers

In recent years, the cluster's competitive position **weakened** as it became **less specialized** in the national context.



Source: CMAP analysis of Economic Modeling Specialists International data (Emsi 2018.4).
Note: Job change is from 2001-17, and total output change is from 2007-17.

Middle-skill workers have **greater** opportunity than the regional average.



Source: CMAP analysis of Integrated Public Use Microdata Series, 2017 American Community Survey and Economic Modeling Specialists International data (Emsi 2018.4).

In 2016, this cluster generated approximately

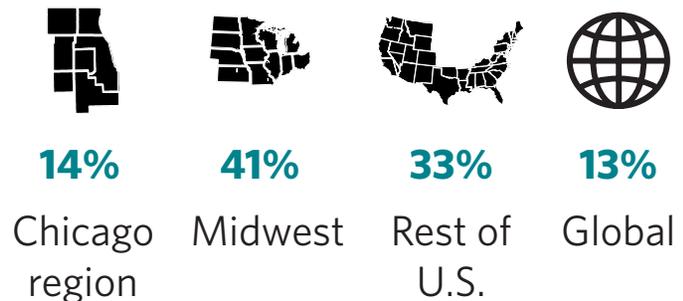
\$31.2 billion

in freight shipments that originate, terminate, or circulate regionally.

Freight mode share, by value



Freight trade geography, by value



Source: CMAP analysis of Freight Analysis Framework data (FAF 4.4.1).
Note: Data includes only the Illinois portion of the U.S. Census Bureau combined statistical area. Freight data is not provided for service clusters.